Train the Trainers: Applying Behavior Analysis in the Classroom

(FY2022 Appropriation Act - Public Act 166 of 2020)

November 15, 2021

Sec. 1930. (1) From the funds appropriated in part 1 for autism train the trainer grant, the department shall appropriate \$244,800.00 to implement a pilot project to train school employees on the principles and practices of applied behavior analysis and research-based intervention strategies. The pilot project must do both of the following:

- (a) Train paraprofessionals and teachers in applied behavior analysis skills that match the national standard for behavior technician-level work and research-based intervention strategies.
- (b) Train teacher consultants, school social workers, school psychologists, and other school personnel responsible for conducting functional behavioral assessments and the development of behavior support plans methods for ensuring implementation of a behavior plan with fidelity and strategies for sharing understanding of evidence-based behavioral health approaches with other school-based personnel.
- (2) The pilot project sites receiving funding under subsection (1) must be 1 of the following:
- (a) A school district with a headquarters located in a census designated place with a population between 3,410 and 3,500 according to the most recent federal decennial census, and in a county with a population between 24,200 and 24,700 according to the most recent federal decennial census.
- (b) A school district with a headquarters located in a township with a population between 53,400 and 71,000 according to the most recent federal decennial census, and in a county with a population between 1,000,000 and 1,800,000 according to the most recent federal decennial census
- (c) A school district with a headquarters located in a township with a population between 41,000 and 43,000 according to the most recent federal decennial census, and in a county with a population between 1,000,000 and 1,800,000 according to the most recent federal decennial census.
- (d) An intermediate school district with a headquarters located in a census designated place with a population between 1,920 and 2,000 according to the most recent federal decennial census, and in a county with a population between 25,950 and 26,160 according to the most recent federal decennial census.
- (e) A constituent district of an intermediate school district with a headquarters located in a city with a population between 6,000 and 6,230 according to the most recent federal decennial census, and in a county with a population between 24,500 and 25,500 according to the most recent federal decennial census.
- (3) Outcomes and performance measures for the pilot project funded under this section shall include, but not be limited to, the following:
 - (a) A decrease in the number of center-program and self-contained-classroom referrals.
 - (b) A decrease in the number of suspensions, removals, and expulsions.
 - (c) A decrease in paraprofessional absences.
 - (d) An increase in teacher retention.
- (e) An increase in safety. (4) The department shall require an annual report from the districts described in subsection (2) on the information required in subsection (3). The department shall

provide the reports to the senate and house appropriations subcommittees on the department budget, the senate and house fiscal agencies, the senate and house policy offices, and the state budget office on the information required in subsection (2).

(4) The department shall require an annual report from the districts described in subsection (2) on the information required in subsection (3). The department shall provide the reports to the senate and house appropriations subcommittees on the department budget, the senate and house fiscal agencies, the senate and house policy offices, and the state budget office on the information required in subsection (2).



Train the Trainers: Applying Behavior Analysis in the Classroom:
Increasing the Intentional Use of ABA in Public Schools
Fiscal Year 2021 Year End Report
Acorn Health of Michigan

Summary:

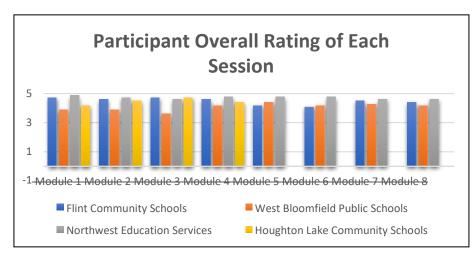
As required under Section 1930 of PA 166 of 2020, the Michigan Department of Health and Human Services (MDHHS) contracted with Acorn Health of Michigan to implement the Applied Behavior Analysis (ABA) training of school personnel and to train additional trainers. The fiscal year 2021 work included four Michigan school districts: West Bloomfield Public Schools, Northwest Education Services, Flint Community Schools, and Houghton Lake Community Schools. This work originated in FY 19 with Walled Lake Community Schools and expanded with personnel from Manistee Intermediate School District in FY 20. This Project was completed to full fidelity of the funding and the outcomes of the Project are included in this report.

Goals of the Project:

Train school personnel in Applied Behavior Analysis (ABA) skills:

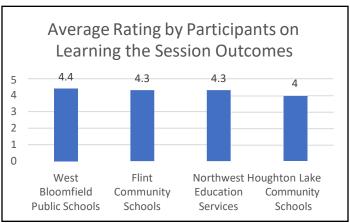
This Project delivered 24 hours of in-person ABA training in eight three-hour modules and monitored the 80% or better accuracy from 10 hours of asynchronous structured online learning. This series of workshops and online learning aligned with the Behavior Analyst Certification Board's task list for Registered Behavior Technicians as the basis for content for school personnel. The in-person training was provided by teams of Board-Certified Behavior Analysts (BCBA) and a Board-Certified Assistant Behavior Analyst (BCaBA) from February 2021 through September 2021. The training evaluations were very favorable, and the results are listed below. A total of **59** participants from the four districts responded to six questions with a five-point scale to evaluate the session and used the same scale to self-assess learning the session's identified learning objectives.

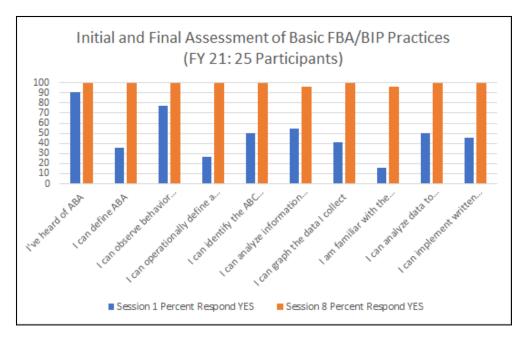
The scale: 1 = Needs Improvement 2 = Fair 3 = Average 4 = Good 5 = Excellent



The workshops were rated at the close of each session. The ratings informed the presenters regarding the participants perception of the value of the workshop in meeting professional learning needs, the usefulness of handouts, the extent of active engagement, use of practical examples, and the quality of the learning experience. The average rating of workshops ranged from 3.6 (average/good) to 4.9 (good/ excellent). Results were discussed with each school district's administrator. Houghton Lake Community Schools has completed two of the eight modules.

Looking at the average rating by participants across all eight modules, similarly strong and positive results are seen across all four districts. Participants provided feedback that the sessions were presented clearly, and the learning objectives were met. Attendance and completion of online instruction resulted in 30 people (57%) earning the \$100 stipend. The stipend is recognition of time and effort to attend sessions and complete homework beyond the typical workday. A certificate acknowledging the hours of attendance was presented to participants. The goal of providing quality training to school personnel has been met.





This chart indicates the percent of participants documenting "yes" to 10 questions. Questions were answered at the beginning of session 1 and again at the end of session 8. In eight sessions plus 10 hours of online instruction, participants clearly learned key pieces of information about ABA, FBAs, and BIPs. Eight out of ten questions were answered affirmatively by 100% of the participants in session 8. The visual display of blue pretraining and orange post training dramatically displays the significant change in learning.

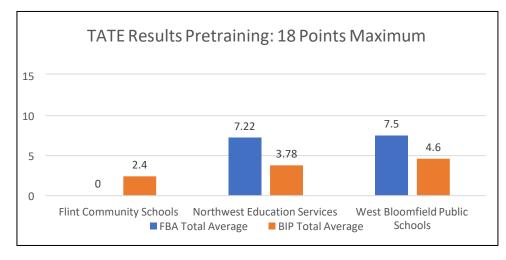
This next set of data described the use of the course content. *The Inventory of Principles and Interventions: Applied Behavior Analysis Inventory of Practices for Classroom Use* asked participants on the last day of training to report whether they were using or could coach others to use the 34 evidence-based interventions or ABA principles in their current roles. Each item also asked if technical assistance to implement these interventions was needed.

Self-Assessment of Use of ABA Principles and Evidence-Based Interventions Post Training FY 21: 25 Participants	Are you comfortable with coaching and/or implementing the principle or intervention?		
ABA Principles & Evidence-Based Interventions	Yes	Not Yet	Need help implementing
Positive Reinforcement	25	1100 100	implementing
2. Behavior Specific Statements/Descriptive			
Feedback/Fact-based Praise	24		1
3. Precision Requests	18	3	2
Extinction + Differential Reinforcement	18	5	1
5. Negative Reinforcement	24	1	1
Established routines throughout the day	24		1
7. Established 3-5 positively stated rules or expectations			
and regularly refer to them for + and – behaviors	22	1	1
8. Using prompt hierarchy	18	5	1
Intentional prompt fading	22	3	
10. Using visual supports	24	1	
11. 4:1 positive statements for every redirection/ correction statement	22	2	
12. Redirection/correction stated in terms of what the child is to do and not about what the child should not do or will not earn because of behavior	23	1	
13. Describe behavior in objective, observable,			
measurable, clear, and complete terms	22	2	1
14. Antecedent-based Interventions	20	3	1
15. Behavior data collection sheets	22	1	2
16. IFEED-AV	14	8	2
17. Task analysis	19	3	2
18. Social Stories/social Narratives	22	2	1
19. Video Modeling	20	4	1
20. Instructional Control	16	5	1
21. First/then	24		1

22. Increasing Opportunities to Respond	21	2	1
23. Active Supervision	21	3	1
24. Hi-Probability Request Sequence	16	8	2
25. Token Economy	24	1	
26. Self-monitor/self-management	22	1	
27. Graphs of behavior data	21	3	1
28. Competing behavior pathway	18	4	1
29. Implementation Fidelity Checklist	18	5	2
30. Social skills instruction	21	4	
31. Preference assessment	19	3	3
32. Function-based Intervention	21	3	1
33. Replacement Behavior	23	1	
34. Operational definition of behaviors	19	6	

The BCBA/BCaBA trainers are available for technical assistance regarding the implementation of the materials and concepts presented in the modules particularly related to those needing assistance. Examples of technical assistance may include, but are not limited to, additional resources uploaded to the district LiveBinder, online meetings to review procedures and processes for FBAs and BIPs, confirmation of behavior definitions and measurement of target behaviors, in-service at staff meetings, review and coaching of the data collection and analysis, and on-site observation or facilitation. The results of this inventory suggest the participants are engaged in applying behavior analysis in the classroom or are prepared to coach others in implementation.

Train school personnel that participate in functional behavior assessments (FBA) and in the development of behavior intervention plans (BIP) on the elements that meet the standard of technically adequate:



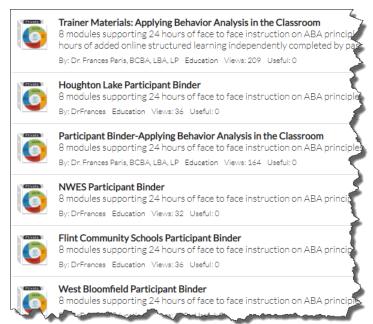
Using the Technical Adequacy Tool for Evaluation (TATE) with a scoring rubric (Lovannone, Kincaid, & Christiansen, 2015) the quality of the FBA and BIP is determined. Assessments are completed by the trainer team. The FBA is scored 0, 1, or 2 on nine elements for a maximum of 18 points. The BIP is similarly scored 0, 1, or 2 on nine components yielding a maximum of 18 points. Feedback on results was provided to the participants and district administrators. Research from across the country reveals that low scores as shown below are typical results prior to training. Post training FBA and BIP will

be completed during the upcoming school year and assessed by the trainer team. Houghton Lake Community Schools provided six pretraining FBAs and BIPs that will be assessed with the TATE by Acorn Health staff.

Increase the number of qualified personnel to lead the course, Applying Behavior Analysis in the Classroom:

On March 5 and 19, 2021, six-hour trainings were conducted with strong favorable results reported by the 2 participants. The session evaluations and self-assessments of competency on the session outcomes was rated using the same 5-point scale described previously. A second round of training trainers in FY 21 was completed on September 10 and 17, 2021 with both new trainers having completed the online instruction on the topic of school-based FBA and BIP. The process towards becoming a trainer includes the 2-day training and continues with online instruction, structured observation of a school-based training, and then the actual delivery of training with coaching and feedback from a qualified trainer. The two new trainers completed the observation of qualified trainers presenting the course on September 28. This month two trainers have submitted resignations to Acorn Health. One was a qualified trainer and the other was in the coaching and feedback while facilitating training stage. The project has four qualified trainers and two others that are completing the process that work for Acorn Health. Additionally, a district-based Board-Certified Behavior Analyst has started the sequence leading to qualification as a trainer of *Applying Behavior Analysis in the Classroom*.

Maintain the independent internet site for training materials and related resources that is accessible to participants and trainers:



<u>LiveBinders</u> website is trustworthy and easily accessible 24 hours a day/ 7 days a week by participants and trainers. LiveBinders warehouse all information needed for training school personnel, supporting trainers, and training new trainers. An additional editor of this website was added during FY 21 with monthly meetings held for revisions and updates.

Two binders were originally created in FY 20: Trainer Materials and Participant Binder. In FY 21 this was expanded to include copies of the Participant Binder that were named for each participating district. Each district has their own access key and with resources and requested materials are added.

Outcomes:

- As required under Section 1930 of PA 166 of 2020, outcomes data to be reported includes:
 - a) A decrease in the number of center-program and self-contained-classroom referrals.
 - b) A decrease in the number of suspensions, removals, and expulsions.
 - c) A decrease in paraprofessional absences.
 - d) An increase in teacher retention.
 - e) An increase in safety.

Northwest Education Services - Bridgeway (formerly Oak Park)		
Data Pre-Training Completion	Data Post-Training Completion	
a. 27 referrals (*IDEA regulations followed when considering the least restrictive environment)	a. 19 (*IDEA regulations followed when considering the least restrictive environment)	
b. 0 suspensions, removals, and expulsions	b. 0 suspensions, removals, and expulsions	
c. Teacher Assistants absence average 4.12 per day	c. Data not available for post-training (only 30 working days currently). Can provide data further into the 2021-2022 school year.	
d. 14 teachers (0 new hires)	d. 14 teachers (1 teacher resignation, 2 teachers assigned new roles in ASD program, 3 Teacher Assistants hired as lead teacher)	
e. Average 3.2 crisis calls per day	e. Safety has improved; crisis team protocol reviewed with team biweekly	

- Testimony Flint Community Schools
 - Melinda Carroll, Director of Learning Services of Flint Community Schools was interviewed regarding her experience with the FY21 Autism Training the Trainer grant. Ms. Carrol is looking forward to continuing the Applying Behavior Analysis in the Classroom training with another cohort during 2021-22 for all the reasons described in the grant's anticipated outcomes.
 - Ms. Carroll joined staff in the training sessions held in June and July 2021 and noted that the lens from which staff viewed behavior has changed. The staff understand the value of data collection and using data to learn the root cause of behavior. She expects staff to share the tools of data collection with general education teachers to support relevant data collection from describing a behavior to developing the functional assessment to implementation of a plan.
 - o Through shared use of the tools introduced in the training, student behavior will be supported successfully

- in the least restrictive setting and reduce referrals to special education and within special education, reduce referrals to center programs.
- With the new understanding of behavior functions, using appropriate tools to define and monitor behavior, staff will respond, and support behavior change sooner. The students will be in class more and engaged in learning. The reduction of out-of-class paperwork combined with increased student participation can increase job satisfaction. Naturally, retention of teachers and reduced paraprofessional absences follow.
- Developing the function-based behavior plans and using fidelity implementation checklists will increase safety for students and staff. Staff will be intentionally using behavior analysis and preventing those emergency situations that are related to injuries.
- Expanding the intentional use of behavior analysis across the district's classrooms is expected in 2021/22 school year. The collection of pre/post training data is in progress now.

Summary of Outcomes - Boilerplate Language:

As required under Section 1930 of PA 166 of 2020, the ABA in the Classroom pilot project sites receiving funding under subsection (1) must be 1 of the following:

- A school district with a headquarters located in a census designated place with a population between 3,410 and 3,500 according to the most recent federal decennial census, and in a county with a population between 24,200 and 24,700 according to the most recent federal decennial census.
 - Houghton Lake (3,427), Roscommon County (24,449) This school district is still receiving the ABA in the Classroom training. A total of 15 participants, including teachers, paraprofessionals, and ancillary staff attended the grant training modules.
- b) A school district with a headquarters located in a township with a population between 53,400 and 71,000 according to the most recent federal decennial census, and in a county with a population between 1,000,000 and 1,800,000 according to the most recent federal decennial census.
 - West Bloomfield Charter Township (64,690), Oakland County (1,202,362) The ABA in the Classroom training was completed in June 2021 and this school district wanted to focus on increasing the technical accuracy of FBAs/BIPs. However, other objectives identified within the boilerplate language may have been improved due to higher quality FBAs/BIPs. A total of 19 participants including teachers, paraprofessionals, and ancillary staff attended the grant training modules.
- c) A school district with a headquarters located in a township with a population between 41,000 and 43,000 according to the most recent federal decennial census, and in a county with a population between 1,000,000 and 1,800,000 according to the most recent federal decennial census.
 - We did not work with a school district in this category.
- d) An intermediate school district with a headquarters located in a census designated place with a population between 1,920 and 2,000 according to the most recent federal decennial census, and in a county with a population between 25,950 and 26,160 according to the most recent federal decennial census.
 - COP ESD in Indian River (1,959), Cheboygan County (26,152) This school district is scheduled for the FY 22 training cohort.
- e) A constituent district of an intermediate school district with a headquarters located in a city with a population between 6,000 and 6,230 according to the most recent federal decennial census, and in a county with a population between 24,500 and 25,500 according to the most recent federal decennial census.
 - We did not work with a school district in this category.

Summary of Outcomes:

- Since March 2020, COVID-19 protocols disrupted data collection of pretraining status. Student attendance was disrupted by closure, pivots from in-person instruction to online and/or other hybrid combinations. Data regarding lost instructional time due to disciplinary removals, center-program and self-contained classroom referrals, suspensions, removals, and expulsions, teacher retention, incident reports, attendance records for staff, and information regarding implementation fidelity of behavior support plans are not available for many of the schools involved in this grant cycle. COVID-19 restrictions have impeded Acorn Health of Michigan's staff from collecting data in direct observation of classrooms to assess pre/post training use of specific interventions.
- The response to COVID-19 state-mandated protocols required significant accommodations to the delivery of the face-to-face instruction. Online instruction was considered and rejected as not being an equivalent learning experience. To maintain safe physical distancing, meeting rooms were used to the maximum allowed capacity for safety. This resulted in a lower number of participants. Attendance was negatively affected by participants health with exposure or positive identification of COVID-19. All training materials handled by participants were laminated for health reasons. Trainers were masks during all sessions for two districts. Districts were reluctant to commit to

face-to-face training during the school year. As the restrictions were gradually lifted three district-initiated requests for training and a fourth just started training this month and another has indicated a preference to start training in October 2021. The cost of training without the grant support may find the district cancelling their request.

- The training course, *Applying Behavior Analysis in the Classroom*, is favorably judged by 59 school personnel with an average rating of 4.4 out of 5 indicating a good to excellent value.
- The 59 participants across four districts have rated their learning of the specific objectives for the sessions on average at 4.25 out of 5 indicating strong perception of learning the ABA principles and evidence-based interventions.
- Two self-reporting assessments were completed at two districts that confirm the learning of the course outcomes.
 A survey of behavior analytic practices for FBA and BIP was completed pre/post training and an inventory of the intentional use of ABA principles and evidence-based practices was measured during the last workshop.
 Tremendous growth was noted from both tools.
- Materials needed to train the course and to participate in the course are available in a single online website, LIVEBINDER. The site gained a co-editor during FY 21 and was reviewed and edited monthly. Four district participant binders were created with access granted to all participants.
- The post-training scoring of the functional behavior assessments and behavior support plans at this date is not complete. Redacted records from the school districts are expected this fall.
- Acorn Health of Michigan committed in FY 21 a variety of activities for expanding awareness and continuing the recruitment of districts and trainers:
 - On June 18, 2021, three BCBAs from Acorn Health presented a webinar in which an overview of the project was provided to other BCBAs statewide. The request to present was from the Upper Peninsula Association of Behavior Analysis and was approved for 2 BACB continuing education units.
 - On August 10, 2021, the statewide project, Applying Behavior Analysis in the Classroom, funded by Michigan Department of Health and Human Services, was approached by Dr. Amy Matthews, Director of the Statewide Autism Resources and Training (START) to collaborate on training school personnel. Dr. Matthews seeks to train school personnel to be trainers of the Practical Functional Assessment (PFA) and Skill-Based Treatment (SBT) of Severe Problem Behavior as developed by Dr. Greg Hanley. School personnel need a strong foundation in behavior analysis prior to training as a trainer of PFA and SBT. That foundation is gained by completing the 34-hour training of Applying Behavior Analysis in the Classroom. Applying Behavior Analysis in the Classroom would provide prerequisite skills for successful complete to PFA and SBT to the extent of becoming school-based trainers.
 - o On July 30, 2021, during an online meeting, this project was introduced to all Acorn Health of Michigan clinical supervisory staff to increase awareness and recruit interested volunteers to the trainer cadre.
 - Supported the increase of Acorn Health of Michigan staff trained to be trainers (4 new trainers in FY 21).

Moving forward: Sustaining the Skills. Increasing Capacity, and Continuing the Benefits of the Intentional Use of ABA in the Schools

- West Bloomfield Public Schools
 - Initiate contact and develop relationship with newly hired Director of Student Support Services.
 - Schedule meeting with points of contact to discuss additional training cohorts with other school personnel
 - Obtain updated functional assessments of behavior and behavior support plans for post-training data collection and analysis with feedback provided to school district to improve technical adequacy and support implementation fidelity.
 - o Provide technical assistance and support as needed to maintain skills developed during training.
 - Maintain district LiveBinder with additional documents and materials added as needed and upon request.
- Northwest Education Services
 - Continue conversation with Supervisor of Programs and Services for Students with Autism Spectrum Disorder and Assistant Superintendent regarding requested cohorts to include additional school personnel.
 - Obtain updated functional assessments of behavior and behavior support plans for post-training data collection and analysis with feedback provided to school district to improve technical adequacy and

- support implementation fidelity.
- Maintain contact with school BCBA to ensure completion of training requirements necessary to join Acorn Health of Michigan trainer team.
- o Utilize school BCBA to co-teach upcoming cohorts within the district alongside experienced trainer.
- o Provided technical assistance and support as needed to maintain skills developed during training.
- Maintain district LiveBinder with additional documents and materials added as needed and upon request.

Flint Community Schools

- o Process invoice for payment of stipend to the participants.
- o Schedule meeting with the Director of Learning Support Services to plan training for the next cohort.
- Obtain post training functional assessments of behavior and behavior support plans for assessment with feedback provided to the school district to improve technical adequacy and support implementation fidelity.
- Provide technical assistance and support as needed to maintain skills developed during training.
- Maintain district LiveBinder with additional documents and materials added as needed and upon request.

Houghton Lake Community Schools

- Complete training sequence by BCBAs with school personnel.
- Pre-training functional assessments of behavior and behavior support plans will be assessed and analyzed with feedback provided to school district to improve technical adequacy and support implementation fidelity.
- Provide technical assistance and support as needed to maintain skills developed during training.
- o Maintain district LiveBinder with additional documents and materials added as needed and upon request.
- Discuss availability of classroom observations conducted by Acorn Health of Michigan staff to collect and analyze additional data regarding implementation of evidence-based strategies.

Cheboygan-Otsego-Presque Isle Educational Service District

 Support the administration and staff with information about the cost of the training absent the renewal of this grant.

Acorn Health of Michigan

- Provide onsite, real world training experience for the recent 2 completers of the Training of Trainers. New trainers to be provided on site coaching and feedback as best practice of acquiring proficiency in new skills.
- Expand the training of trainers to additional BCBA/BCaBAs that are currently employed by school districts.
- Collaborate with known interested districts to develop goals for the training and schedule the training.
- Consider how to support trainers that leave the employment of Acorn Health and wish to train school
 personnel using the Applying Behavior Analysis in the Classroom curriculum.
- o Consider collaboration with statewide project director, Amy Matthews.
- Consider expansion to other districts by reaching out to statewide organizations and distributing prepared information for recruitment of districts.

Permanent Products

- Monthly status and progress reports for goals and objectives for FY21.
- Scope and Sequence of the course.
- Introduction to Applying Behavior Analysis in the Classroom.
- Template for SCECHs application to Michigan Department of Education.
- Interest Survey Questions for School Administrators.
- Inventory of ABA principles and evidence-based practices.
- Observation Checklist for Delivery of Training to assure high quality instruction.
- Applying Behavior Analysis in the Classroom course materials
 - Glossary created for this course.
 - o 8 PowerPoints (one per module).
 - 8 Participant Workbooks (one per module).
 - o 8 Focus Student questionnaires.
 - 8 Responsible Use of ABA scenarios.
 - 8 Session Reflections.

- 8 "What do you know now about ABA" quizzes and answersheets.
- o 8 Session evaluations.
- o Purpose and objectives for each module.
- Training Sequence for each module for trainers to follow.
- Training of Trainers: Applying Behavior Analysis in the Classroom 2-day training materials
 - PowerPoint for Day 1.
 - o Purpose, Outcomes and Agenda for wall charts for Days 1 & 2.
 - o Reflections for Day 1.
 - "What do you know now about Applying Behavior Analysis in the Classroom" quiz for Day 1.
 - Session evaluation form for Days 1 & 2.
 - o List of materials to create a Trainer's Kit.
 - Training Sequence for each module that aligns time to the topic, PowerPoint slides, activity and materials needed for training and accompanying learning activities.
 - Handout that lists the 8 modules, topic for each module, and the strategy for the day.